

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF MISSISSIPPI  
EASTERN DIVISION**

**BURROUGHS DIESEL, INC.**

**PLAINTIFF**

**v.**

**CIVIL ACTION NO. 2:18-CV-48-KS-MTP**

**THE TRAVELERS INDEMNITY  
COMPANY OF AMERICA**

**DEFENDANT**

**MEMORANDUM OPINION AND ORDER**

For the reasons provided below, the Court **grants in part and denies in part** Travelers' Motion to Strike [124] an affidavit from Plaintiff's expert, Dr. Fernando Lorenzo, and the Court **grants in part and denies in part** Travelers' Motion to Exclude [105] the testimony of Plaintiff's expert, Dr. Fernando Lorenzo.

**I. BACKGROUND**

This is an insurance coverage dispute arising from a hydrochloric acid ("HCl") spill. On October 14, 2016, approximately 5,300 gallons of HCl leaked from a storage tank on property adjacent to that owned by Plaintiff, Burroughs Diesel, Inc. Plaintiff alleges that the spill created a cloud of HCl vapor that traveled to and engulfed its property for hours, causing extensive damage to buildings, vehicles, inventory, tools, machines, and equipment.

At the time of the spill, Plaintiff was insured under a property insurance policy issued by Defendant, Travelers Indemnity Company of America. Plaintiff filed a claim shortly after the spill. On October 26, 2016, Travelers' engineer investigated

the damage to Plaintiff's facilities and property. One week later, the adjuster sent Plaintiff an e-mail denying the claim, citing the policy's pollution exclusion. Over the next year or so, Plaintiff continued to request that Travelers pay the claim, and Travelers continued to deny it.

Plaintiff filed this suit against Travelers, claiming that Travelers wrongfully denied coverage, and that it failed to fully and timely investigate the claim. Plaintiff asserted the following claims: breach of contract, breach of the duty of good faith and fair dealing, and tortious breach of contract. Plaintiff seeks an award of benefits under the policy, punitive damages, attorney's fees, and interest. Travelers filed two evidentiary motions, which the Court now addresses.

## **II. MOTION TO STRIKE AFFIDAVIT [124]**

Travelers filed a Motion to Strike [124] an affidavit [116-4] from Plaintiff's expert, Dr. Fernando Lorenzo, presented in support of Plaintiff's response [116] to Traveler's Motion to Exclude [105] the testimony of Plaintiff's experts. Although Travelers contends that the entire affidavit constitutes new, previously undisclosed expert testimony, it only addressed several specific topics from the document.

### ***A. Side Panels' Loss of Useful Life***

First, Travelers contends that Lorenzo articulated a new basis for his opinion that the painted side panels on Plaintiff's metal buildings had lost 50% of their useful life. In the affidavit, he stated:

It is also my opinion that 50% of the protective baked-on enamel painted coating on the steel side panels of the 10 buildings was reduced due to

the acid exposure. The baked-on enamel paint is recognized as providing corrosion protection by the Majestic Steel publication . . . , but is less resilient to corrosion than galvanized zinc coatings. As explained in my deposition . . . , my original 50% metal reduction calculation (with a thicker coating) reasonably reflects the estimated 50% amount of paint loss in the protective enamel paint coatings on the side panels.

Exhibit 4 to Response at 4-5, *Burroughs Diesel, Inc. v. Travelers Ind. Co. of Am.*, No. 2:18-CV-48-KS-MTP (S.D. Miss. July 19, 2019), ECF No. 116-4. Lorenzo cited two PDL Handbooks in support of this opinion. *Id.* at 5 n. 1.

During his deposition, Lorenzo also testified that 50% of the paint on the metal buildings' side panels had been corroded. Exhibit BB to Motion for Summary Judgment at 48, *Burroughs Diesel, Inc. v. Travelers Ind. Co. of Am.*, No. 2:18-CV-48-KS-MTP (S.D. Miss. June 17, 2019), ECF No. 108-28. When directly asked, Lorenzo stated that the only basis for this opinion was an article from a do-it-yourself home repair website. *Id.* at 48-49. When discussing the paint on the side panels, he made no mention of a Majestic Steel publication or PDL Handbooks. Therefore, the Court concludes that Lorenzo's citation of these sources as support for his opinion regarding the loss of useful life in the metal buildings' side panels is new testimony, previously undisclosed.

Rule 26 provides that "a party must disclose to the other parties the identity of any witness it may use at trial to present" expert testimony. FED. R. CIV. P. 26(a)(2)(A). "Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report – prepared and signed by the witness – if the witness is one retained or specially employed to provide expert testimony in the case

. . . .” FED. R. CIV. P. 26(a)(2)(B). “A party must make these disclosures at the times and in the sequence that the court orders.” FED. R. CIV. P. 26(a)(2)(D). Local Rule 26 provides that a “party must make full and complete disclosure as required by Fed. R. Civ. P. 26(a) and L.U.Civ.R. 26(a)(2)(D) no later than the time specified in the case management order.” L.U.Civ.R. 26(a)(2).

Additionally, “[t]he parties must supplement these disclosures when required under Rule 26(e).” FED. R. CIV. P. 26(a)(2)(E). “[A] party is required to supplement its expert disclosures if the court so orders or if the party learns that in some material respect the information disclosed is incomplete or incorrect and if the additional or corrective information has not otherwise been made known to the other parties during the discovery process or in writing.” *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., Inc.*, 73 F.3d 546, 570 n. 42 (5th Cir. 1996) (quoting FED. R. CIV. P. 26(e)(1)). “[T]he party’s duty to supplement extends both to information included in the report and to information given during the expert’s deposition. Any additions or changes to this information must be disclosed by the time the party’s pretrial disclosures under Rule 26(a)(3) are due.” FED. R. CIV. P. 26(e)(2). “Unless the court orders otherwise,” pretrial disclosures must be made at least thirty days before trial.” FED. R. CIV. P. 26(a)(3). Local Rule 26 provides that a “party is under a duty to supplement disclosures at appropriate intervals under Fed. R. Civ. P. 26(e) and *in no event later than the discovery deadline* established by the case management order.” L.U.Civ.R. 26(a)(5) (emphasis added).

Therefore, if Plaintiff wanted to supplement the information provided in Lorenzo's expert report and deposition, it was required to do so by the discovery deadline of May 31, 2019. *See* Amended Case Management Order, *Burroughs Diesel, Inc. v. Travelers Ind. Co. of Am.*, No. 2:18-CV-48-KS-MTP (S.D. Miss. Nov. 8, 2018), ECF No. 37. Here, Plaintiff first disclosed Lorenzo's reliance on the Majestic Steel publication and PDL Handbooks to support his opinion regarding the side panels' loss of useful life on July 19, 2019, in response to Travelers' motion to exclude Lorenzo's testimony. *See* Response to Motion to Exclude, *Burroughs Diesel, Inc. v. Travelers Ind. Co. of Am.*, No. 2:18-CV-48-KS-MTP (S.D. Miss. July 19, 2019), ECF No. 116. Therefore, the new testimony was not timely disclosed.

Rule 37 provides: "If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at trial, unless the failure was substantially justified or is harmless." FED. R. CIV. P. 37(c)(1). When determining whether to strike an expert's testimony for a party's failure to timely disclose it, the Court considers the following factors:

- (1) the importance of the witnesses' testimony;
- (2) the prejudice to the opposing party of allowing the witnesses to testify;
- (3) the possibility of curing such prejudice by a continuance; and
- (4) the explanation, if any, for the party's failure to comply with the discovery order.

*Sierra Club*, 73 F.3d at 572; *see also Reliance Ins. Co. v. La. Land & Exploration Co.*,

110 F.3d 253, 257 (5th Cir. 1997).

The Court will assume that the proposed testimony is important, but admitting it at this late stage of the case would be prejudicial to Travelers. Lorenzo cited the additional sources in response to Travelers' motion to exclude his testimony for, among other purported reasons, lack of support. Travelers has not had a chance to cross-examine Lorenzo concerning the new sources, to investigate them before filing its dispositive motions, or to acquire a rebuttal opinion from its own expert. There is no time to cure the prejudice, because the pretrial conference is imminent. Finally, Plaintiff has not provided any explanation for its failure to timely disclose these sources.

Therefore, the Court concludes that Lorenzo's late citation of these additional sources in support of his opinions regarding the side panels' loss of useful life should be excluded. The Court strikes sub-paragraph (C) of Section 3 of Lorenzo's affidavit. See Exhibit 4 [116-4], at 4-5. Plaintiff is not allowed to rely on this evidence or testimony in support of or response to a motion, at a hearing, or at trial.

***B. Total Loss of Remaining Useful Life***

Next, Travelers argues that Lorenzo asserted a new opinion regarding the total loss of remaining useful life for Plaintiff's metal buildings. In the affidavit, Lorenzo stated:

As described herein, after and as a result of the acid exposure at issue, the roof panels lost 80% of its [sic] remaining useful life, and the side panels lost 50% in its [sic] remaining useful life. Together, there is an average 65% reduction in useful life, which is proportionate to the

reduction in the fair market value of the buildings after the spill. As such, the diminution in value of the buildings after the spill is 65% of the pre-spill fair market value . . . .

*Id.* at 6.

In his initial report, dated March 29, 2019, Lorenzo stated that the roofs and side panels on the metal buildings had lost 50% of their remaining useful life. Exhibit CC to Motion for Summary Judgment at 8, *Burroughs Diesel, Inc. v. Travelers Ind. Co. of Am.*, No. 2:18-CV-48-KS-MTP (S.D. Miss. June 17, 2019), ECF No. 108-29. Later, during his deposition, he revised his estimate as to the roofs, asserting that they had lost 80% of their remaining useful life. Exhibit BB [108-28], at 30. Prior to the affidavit produced in response to Travelers' motion, Lorenzo never claimed that the whole buildings had lost 65% of their remaining useful life. Moreover, he never provided any testimony suggesting that one could or should calculate the buildings' loss of remaining useful life by splitting the difference between that of the roofs and side panels. In response, Plaintiff only notes Lorenzo's testimony regarding the loss of useful life of the roofs and side panels, rather than that of the buildings as a whole. Therefore, the Court concludes that Lorenzo's opinion that the buildings lost 65% of their remaining useful life is a new opinion that was not timely disclosed.

The Court will assume that the opinion is important, but admitting it at this late stage of the case would be prejudicial to Travelers. Travelers has not had a chance to cross-examine Lorenzo concerning the new opinion, or to acquire a rebuttal opinion from its own expert. There is no time to cure the prejudice, because the

pretrial conference is imminent. Finally, Plaintiff has not provided any explanation for its failure to timely disclose Lorenzo's opinion regarding the buildings' loss of remaining useful life. Therefore, the Court strikes Lorenzo's opinion that the metal buildings lost 65% of their remaining useful life. Plaintiff is not allowed to rely on this evidence or testimony in support of or response to a motion, at a hearing, or at trial.

### ***C. Difficulty of Repair***

Travelers also argues that the affidavit contains a new opinion regarding the difficulty of repairing the metal buildings' side panels, and that repair would produce an inferior product. In the affidavit, he stated:

During my deposition . . . , I explained that the zinc coatings of the roof panels are made in the factory through hot-dipped galvanization, and re-galvanizing the damaged roofing panels, once removed, would necessitate farming the same out to a qualified third-party capable of re-applying the galvanizing coating commensurate with the original finish. Further, any attempted repair of the roof panels with zinc-based paint will produce an inferior protective coating on the steel that last [sic] approximately 1/5 to 1/10 as long as a roof panel with galvanized zinc coating installed during the manufacturing process. There is also far less adherence or bonding between the zinc paint and steel than the hot-dipped galvanizing process used in the manufactured panels. Efforts to remediate the damages incurred to the roofs of BDI's buildings necessitate the removal of all metal roofing panels for thorough cleaning, which would then have to be reinstalled after either re-galvanizing or coating with a zinc-based paint solution. Removal and re-installation of each and all panels would be necessary so as to address the HCL [sic] contamination beneath each of the overlapping joints upon the roofs which exacerbate the corrosion process. This process will be just as costly as removing and installing new galvanized roof panels and will produce a grossly inferior product that will not provide the intrinsic cathodic protection obtained from hot dip galvanizing in the original roof panels.



Exhibit 4 [116-4], at 6-7. In contrast, during his deposition, Lorenzo expressed no opinion that repaired roof panels would be inferior to the originals. In fact, when asked if re-galvanizing would “eliminate the problem,” he simply answered, “Yes. . . . But you understand that the galvanizing process for the roof plate is how the galvanizing is – it’s a process that is made during the protection [sic] of the roof panels.” Exhibit BB [108-28], at 48.

In response, Plaintiff has not directed the Court to any additional prior testimony from Lorenzo concerning the feasibility, cost, desirability, or quality of repaired roof panels. Therefore, the Court concludes that Lorenzo’s opinions on this topic, recited above, are so far beyond the scope of his previous testimony that they constitute new opinions that were not timely disclosed.

The Court will assume that Lorenzo’s testimony on this topic is important, but admitting it at this late stage of the case would be prejudicial to Travelers. Travelers has not had a chance to cross-examine Lorenzo concerning these opinions, or to acquire rebuttal testimony from its own expert. There is no time to cure the prejudice, because the pretrial conference is imminent. Finally, Plaintiff has not provided any explanation for its failure to timely disclose this testimony. Therefore, the Court strikes Lorenzo’s opinions regarding the difficulty and desirability of repairing the metal roofs, as contained in the entirety of Section 5, sub-paragraph (A) of the affidavit. *See* Exhibit 4 [116-4], at 6-7. Plaintiff is not allowed to rely on this evidence or testimony in support of or response to a motion, at a hearing, or at trial.

#### ***D. Zinc Coating***

Finally, Travelers argues that Lorenzo offered new support for his opinions regarding the amount of zinc coating corroded from the roofing panels by exposure to HCl. At his deposition, Lorenzo testified that he did not know the original thickness of the zinc coating on the roof panels. Exhibit BB [108-28], at 30. He said: “I’m assuming they were G60. In doing the calculations, I didn’t check exactly what – but . . . it’s some of the most common galvanized sheets that are sold in the U.S. . . . I don’t know exactly if they are G60. . . . But I’m using a calculation based on that number.” *Id.* In his affidavit, Lorenzo supplemented this testimony. He said: “I have confirmed with Michael Burroughs that the subject galvanized steel roof panels on the 10 buildings are ‘G60’ designated panels, which . . . is the common metal roofing panel used for the subject industrial setting.” Exhibit 4 [116-4], at 4. This is indisputably a new, previously undisclosed basis for Lorenzo’s opinion regarding the amount of zinc coating corroded from the roofing panels by exposure to HCl.

Lorenzo’s testimony on this topic is important, in that it provides support for his opinion regarding the amount of zinc coating lost by exposure to HCl, but Plaintiff provided no explanation as to why Lorenzo didn’t confirm the assumption and supplement his testimony during the discovery period. Admitting the testimony would not be prejudicial to Travelers, in that Lorenzo made all his calculations based on the G60 figures, and all the late supplementation did was confirm his assumption. Travelers had an opportunity to cross-examine Lorenzo on all the relevant numbers,

and to obtain its own rebuttal testimony. Travelers has not identified any way that admission of Lorenzo's confirmation of his prior assumption prejudices it, beyond the fact that it lends support to Plaintiff's response in opposition to the pending motion to exclude Lorenzo's testimony.

Although there is no reason Plaintiff could not have timely supplemented Lorenzo's testimony with confirmation that the roofing panels were "G60" panels, there is little to no prejudice to Travelers if the Court admits the testimony. The Court denies this aspect of Travelers' motion.

***E. Conclusion***

For these reasons, the Court **grants in part and denies in part** Travelers' Motion to Strike [124] the affidavit of Dr. Fernando Lorenzo. The Court declines to strike the entire affidavit. With respect to the specific sections addressed in Travelers' briefing, the Court grants the motion as to Lorenzo's citation of additional sources in support of his opinions regarding the side panels' loss of useful life, his new opinion that the metal buildings lost 65% of their remaining useful life, and his new opinions regarding the difficulty and desirability of repairing the metal roofs. But the Court denies the motion as to Lorenzo's supplementation of his prior assumption that the roofing panels were "G60" panels.

**III. MOTION TO EXCLUDE EXPERT TESTIMONY [105]**

Travelers argues that three of the opinions provided by Plaintiff's expert, Fernando Lorenzo, should be excluded. Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID. 702. Therefore, “when expert testimony is offered, the trial judge must perform a screening function to ensure that the expert’s opinion is reliable and relevant to the facts at issue in the case.” *Watkins v. Telsmith, Inc.*, 121 F.3d 984, 988-89 (5th Cir. 1997).

In *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), the Supreme Court provided a nonexclusive list of “general observations intended to guide a district court’s evaluation of scientific evidence,” including: “whether a theory or technique can be (and has been) tested, whether it has been subjected to peer review and publication, the known or potential rate of error, and the existence and maintenance of standards controlling the technique’s operation, as well as general acceptance.” *Watkins*, 121 F.3d at 989 (punctuation omitted).

Not every guidepost in *Daubert* will necessarily apply . . . , but the district court’s preliminary assessment of whether the reasoning or

methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue is no less important.

*Id.* at 990-91 (punctuation omitted).

Expert testimony must be supported by “more than subjective belief or unsupported speculation.” *Paz v. Brush Eng’red Materials, Inc.*, 555 F.3d 383, 388 (5th Cir. 2009). It “must be reliable at each and every step or it is inadmissible. The reliability analysis applies to all aspects of an expert’s testimony: the methodology, the facts underlying the expert’s opinion, the link between the facts and the conclusion, *et alia*.” *Seaman v. Seacor Marine LLC*, 326 F. App’x 721, 725 (5th Cir. 2009). “Overall, the trial court must strive to ensure that the expert, whether basing testimony on professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *United States v. Valencia*, 600 F.3d 389, 424 (5th Cir. 2010).

But the Court’s role as gatekeeper is not meant to supplant the adversary system because “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596. The Court should focus solely on the proposed expert’s “principles and methodology, not on the conclusions that they generate.” *Id.* at 595. But “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence connected to existing data only by the *ipse dixit* of the expert.” *GE v. Joiner*, 522 U.S.

136, 146, 118 S. Ct. 512, 139 L. Ed. 2d 508 (1997).

In summary, the proponent of expert testimony must demonstrate that the proposed expert is qualified, that the testimony is reliable, and that it is relevant to a question of fact before the jury. *United States v. Hicks*, 389 F.3d 514, 525 (5th Cir. 2004). The proponent must prove these requirements “by a preponderance of the evidence.” *United States v. Fullwood*, 342 F.3d 409, 412 (5th Cir. 2003).

**A. “Smoke”**

Travelers argues that the Court should exclude Lorenzo’s description of the HCl vapor as “smoke.” In his expert report, Lorenzo stated that Plaintiff’s property was damaged by “Hydrochloric Acid (HCl) vapor or smoke that emanated from the premises occupied by Baker Petrolite LLC.” Exhibit CC [108-29], at 4. During his deposition, Lorenzo stated that he and his partner, Roger Craddock, decided to use the term “smoke” in the report. Exhibit BB [108-28], at 20. He explained: “[I]f you review, you know, the definitions, . . . they are so close together that we wanted to make sure that what some people could refer to as a vapor, you know, it could also be viewed as a smoke. And it’s basically either liquid or solid particles in air that will reach a condition where light could not fully penetrate the . . . environment.” *Id.* When asked whether there was any difference between “smoke” and “vapor,” Lorenzo said that “they are . . . very much synonymous.” *Id.* at 21. When pressed to provide an opinion as to whether what occurred in this case was “smoke” or “vapor,” Lorenzo testified: “It’s both. Or it could be both because . . . when you have an acid vapor

release, you will have hydrochloric acid gas release to the . . . environment in sufficient quantities that will not allow the light to penetrate.” *Id.*

First, Travelers contends that Lorenzo is not qualified to describe the liquid vapor as “smoke.” Rule 702 provides that an expert may be qualified by “knowledge, skill, experience, training, or education . . . .” FED. R. EVID. 702. Expert testimony “serves to inform the jury about affairs not within the understanding of the average man.” *United States v. Moore*, 997 F.2d 55, 57 (5th Cir. 1993). Therefore, “[a] district court should refuse to allow an expert witness to testify if it finds that the witness is not qualified to testify in a particular field or on a given subject.” *Wilson v. Woods*, 163 F.3d 935, 937 (5th Cir. 1999).

A proposed expert does not have to be “highly qualified in order to testify about a given issue. Differences in expertise bear chiefly on the weight to be assigned to the testimony by the trier of fact, not its admissibility.” *Huss v. Gayden*, 571 F.3d 442, 452 (5th Cir. 2009). Likewise, lack of personal experience “should not ordinarily disqualify an expert, so long as the expert is qualified based on some other factor provided by Rule 702 . . . .” *United States v. Wen Chyu Liu*, 716 F.3d 159, 168 (5th Cir. 2013). Moreover, an “expert witness is not strictly confined to his area of practice, but may testify concerning related applications; a lack of specialization does not affect the admissibility of the opinion, but only its weight.” *Id.* at 168-69. Regardless of its source, “the witness’s . . . specialized knowledge,” must be “sufficiently related to the issues and evidence before the trier of fact that the witness’s proposed testimony will

help the trier of fact.” *Id.* at 167.

Lorenzo is qualified to provide the testimony cited above concerning whether the acid vapor at issue in this case constituted “smoke,” as he defined the term.<sup>1</sup> Lorenzo has a Ph.D. in “Materials Science and Engineering.” Exhibit CC [108-29], at 16. He has over 35 years of experience in mechanical engineering. *Id.* This education and experience is enough to qualify him to describe the vapor cloud as “smoke,” as he defined the term. Any quibbles over his qualifications go to the weight of his testimony, rather than its admissibility.

Travelers also argues that Lorenzo’s description of the HCl vapor as “smoke” is unreliable because he performed no research as to what constitutes “smoke.” This goes to the weight of his testimony, rather than its admissibility. First, this is not necessarily the sort of testimony susceptible to testing or research, and every guidepost in *Daubert* will not apply to every case. *Watkins*, 121 F.3d at 990. Lorenzo provided a rational basis for his definition of the term “smoke,” however out of step it might be with the ordinary and popular meaning of the term. Based on the current record, the Court can not say that Lorenzo’s use of the term “smoke” is unreliable. For these reasons, the Court denies this aspect of Travelers’ motion.

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<sup>1</sup> Under Mississippi law, “[t]he interpretation of insurance policy language is a question of law.” *Lewis v. Allstate Ins. Co.*, 730 So. 2d 65, 68 (Miss. 1998). Moreover, undefined terms in an insurance policy are interpreted in their “plain, ordinary, and popular sense.” *Blackledge v. Omega Ins. Co.*, 740 So. 2d 295, 298 (Miss. 1999). Therefore, while Lorenzo’s definition of “smoke” and his opinion as to whether the HCl vapor constituted “smoke” may be reliable, they may also be irrelevant to any issue before the jury. Accordingly, the Court’s rejection of Travelers’ arguments here do not necessarily mean that all Lorenzo’s “smoke” opinions will be admissible at trial.



**B.     *Roofs' Loss of Life***

Next, Travelers argues that the Court should exclude Lorenzo's opinion regarding the loss of useful life to the roofs on Plaintiff's metal buildings. The roofing panels were made of galvanized steel, which is steel coated with zinc. Based on his knowledge of industry standards, Lorenzo initially assumed that the roofing panels had a zinc coating consistent with "G60" panels. Exhibit BB [108-28], at 28; Exhibit 4 [116-4], at 4. He then applied an equation based on the chemical reaction between HCl and zinc to determine how much of the zinc would have been consumed by HCl. Exhibit 4 [116-4], at 3-4. He used a pH level consistent with some of the third-party samples taken from the scene. *Id.* Lorenzo later confirmed that the panels were "G60" panels, but he learned (from Baker's expert) that the zinc coating on "G60" panels was thinner than he had originally believed. *Id.* at 4. He revised his calculations accordingly. *Id.*; Exhibit BB [108-28], at 28. This was the reasoning underlying his testimony that HCl vapors eroded the zinc coating on the roofing panels, reducing their useful life.

Travelers argues that Lorenzo's opinions are not supported by sufficient data, and it challenges the connection between the data and his conclusions. Lorenzo relied on samples taken by Richard Edwards, an engineer hired by Travelers. Edwards took twelve usable samples from the Plaintiff's property, and only six of the samples were from roofs. Exhibit C to Motion in Limine #5 at 22, *Burroughs Diesel, Inc. v. Travelers Ind. Co. of Am.*, No. 2:18-CV-48-KS-MTP (S.D. Miss. Oct. 8, 2019), ECF No. 146-3.

Beyond cursory descriptions in the chart Edwards provided, Lorenzo did not know where the samples were taken. Exhibit BB [108-28], at 40-42. Also, Edwards only confirmed or denied the presence of chlorides, an indicator of HCl exposure, and Lorenzo did not know the concentration of chlorides in any sample. Exhibit C [146-3], at 22; Exhibit BB [108-28], at 61-62.

Lorenzo also assumed that every metal roof on Plaintiff's property was exposed to the same concentration of HCl, based on a limited number of data points. He acknowledged this inferential leap in his report, noting that Edwards' data "clearly confirms that . . . almost every surface . . . was exposed to the highly corrosive effect of the Hydrochloric Acid vapors released from Baker Petrolite." Exhibit CC [108-29], at 7. He took the inference a step further when calculating the roofs' loss of zinc coating. Lorenzo assumed that the roofs were exposed to HCl solution with a pH value of 1.0, *id.* at 7, but Edwards only recorded a single sample with a pH value of 1.0 – from the surface of an ice machine, rather than from a roof. Exhibit C [146-3], at 22.

Finally, Lorenzo's opinion regarding the roofs' loss of useful life is complete speculation. Lorenzo assumed that the reduction in the useful life of the metal roofing panels was equal to his calculated reduction in the zinc coating on the panels, without articulating any methodology or reasoning to support such an inference. Exhibit CC [108-29], at 8.

In response to these issues with Lorenzo's testimony, Plaintiff notes that Lorenzo's opinions regarding the roofs' loss of useful life are supported by calculations

based on samples taken from the site, known chemical reactions between zinc and HCl, and the undisputed thickness of the zinc coating on the steel roofing panels. Plaintiff contends that Travelers' disputes with Lorenzo's testimony are just "fodder for cross-examination," rather than grounds for exclusion.

Rule 702 specifically requires that an expert's testimony be based upon sufficient facts or data. FED. R. EVID. 702(b). Phrased differently, proposed expert testimony "must be supported by appropriate validation – i.e. good grounds, based on what is known." *Daubert*, 509 U.S. at 509 (punctuation omitted). "Where an expert's opinion is based on insufficient information, the analysis is unreliable." *Paz*, 555 F.3d at 388; *see also Seaman*, 326 F. App'x at 725. Therefore, expert testimony must be supported by "more than subjective belief or unsupported speculation." *Paz*, 555 F.3d at 300. "Although the *Daubert* reliability analysis is flexible and the proponent of expert testimony need not satisfy every one of its factors, the existence of sufficient facts is . . . in all cases mandatory," *Moore v. Int'l Paint, LLC*, 547 F. App'x 513, 515 (5th Cir. 2013), and "a district court has broad discretion to determine whether a body of evidence relied upon by an expert is sufficient to support that expert's opinion." *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 354 (5th Cir. 2007). "Overall, the trial court must strive to ensure that the expert, whether basing testimony on professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Valencia*, 600 F.3d at 424.

Moreover, while “reliable expert testimony often involves estimation and reasonable inferences from a sometimes incomplete record,” an expert may not make “numerous assumptions with no apparent underlying rationale.” *Moore*, 547 F. App’x at 516. Experts can build up to conclusions through basic scientific premises, but “the extrapolation or leap . . . must be reasonable and scientifically valid.” *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 279 (5th Cir. 1998). “[C]ourts are free to reject a theory based on extrapolation when ‘there is simply too great an analytical gap between the data and the opinion proffered.’” *Johnson v. Arkema, Inc.*, 685 F.3d 452, 460-61 (5th Cir. 2012) (quoting *Joiner*, 522 U.S. at 146). As noted above, “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence connected to existing data only by the *ipse dixit* of the expert.” *Joiner*, 522 U.S. at 146.

Here, Plaintiff has not offered any substantial opposition to Travelers’ argument. Plaintiff doesn’t dispute that Lorenzo based his opinions regarding the metal roofs on a limited number of samples from a variety of surfaces throughout Plaintiff’s property. Likewise, Plaintiff does not dispute that Lorenzo doesn’t know where the samples were taken or the concentration of chlorides in each sample.

Even if the Court agreed with Plaintiff that the problems with the data go to the weight of Lorenzo’s testimony, rather than its admissibility, his conclusions still rest on various unsupported inferences and extrapolations. He assumed that the HCl exposure level of every metal roof was at least the same as that of an ice machine. He

reasoned that the roofs would have actually received *more* exposure to HCl than the ice machine because they were not under cover, and that the ice machine sample had a lower pH than the roof samples because the roofs had been exposed to rain during the two weeks between the spill and Edwards' inspection. Lorenzo also assumed that the reduction in the useful life of the metal roofing panels was equal to his calculated reduction in the zinc coating on the panels, without articulating any methodology or reasoning to support such an inference.

The Court finds that Lorenzo's opinions regarding the remaining useful life of the roofing panels on Plaintiffs' metal buildings is unreliable because of the combination of 1) their sketchy factual basis, and 2) Lorenzo's unsupported inferences and extrapolations from the already limited facts. The Court grants Travelers' motion as to this issue.

***C. Side Panels' Loss of Life***

Finally, Travelers argues that the Court should exclude Lorenzo's opinions regarding the loss of useful life to the metal buildings' side panels. Travelers argues that Lorenzo based his opinion on insufficient data, that he relied on a single unreliable source, and that his conclusions are based on blind conjecture.

As noted above, Lorenzo relied on samples taken by Richard Edwards, a consultant hired by Travelers. Edwards only took twelve usable samples from Plaintiff's property, and Lorenzo doesn't know whether any of them are from the side panels of Plaintiff's metal buildings. Exhibit C [146-3], at 22; Exhibit BB [108-28], at

41-43. Regardless, Edwards only confirmed or denied the presence of chlorides, an indicator of HCl exposure, and Lorenzo doesn't know the concentration of chlorides at any specific location on the property. Exhibit C [146-3], at 22; Exhibit BB [108-28], at 62.

Also, during his deposition, Lorenzo admitted that the only basis for his opinion that the painted metal side panels had lost 50% of their useful life was an article from [www.hunker.com](http://www.hunker.com), a do-it-yourself home repair website. Exhibit BB [108-28], at 48-49. The record contains no evidence that this is the sort of authority typically relied on by experts in the fields of metallurgy and/or mechanical engineering. *See Valencia*, 600 F.3d at 424.

Finally, Lorenzo provided no basis whatsoever for his assumption that the side panels had lost 50% of their useful life. With respect to the roofs, he performed calculations based on the chemical reaction between HCl and zinc. He performed no such calculation with respect to the paint on the side panels, and expressed no opinion as to the amount of paint eroded by HCl. He noted that some paints include metal compounds, and, therefore, he assumed that the HCl would react with the paint in the same way it theoretically reacted with the zinc on the roofing panels. Exhibit BB [108-28], at 67. But he did not identify any metal compounds in the paint on the side panels or perform calculations as he did with the roofing panels. He assumed that there were metals in the paint and pulled a number out of thin air as to the amount of paint eroded by HCl. *See id.* at 49, 67. Then he assumed – without articulating any

supporting methodology or rationale – that a loss of 50% of the paint would cause a 50% loss in the useful life of the side panels.

The Court excludes Lorenzo’s opinion regarding the loss of useful life of the metal buildings’ side panels because 1) he failed to demonstrate that the single source he relied on in support of his opinion was the sort typically relied on by experts in his field, and 2) his failure to articulate a methodology or rationale in support of opinions regarding the amount of paint eroded and loss of useful life. The Court grants Travelers’ motion as to this issue.

#### **IV. CONCLUSION**

For these reasons, the Court **grants in part and denies in part** Travelers’ Motion to Strike [124] an affidavit from Plaintiff’s expert, Dr. Fernando Lorenzo. Specifically, the Court declines to strike the entire affidavit. With respect to the sections addressed in Travelers’ briefing, the Court grants the motion as to Lorenzo’s citation of additional sources in support of his opinions regarding the side panels’ loss of useful life, his new opinion that the metal buildings lost 65% of their remaining useful life, and his new opinions regarding the difficulty and desirability of repairing the metal roofs. But the Court denies the motion as to Lorenzo’s supplementation of his prior assumption that the roofing panels were “G60” panels.

The Court also **grants in part and denies in part** Travelers’ Motion to Exclude [105] the testimony of Plaintiff’s expert, Dr. Fernando Lorenzo. The Court denies the motion as to Lorenzo’s use of the term “smoke,” but the Court grants the

motion as to Lorenzo's opinions regarding the remaining useful life of the roofing and side panels on Plaintiffs' metal buildings.

SO ORDERED AND ADJUDGED this 25th day of October, 2019.

/s/ Keith Starrett  
KEITH STARRETT  
UNITED STATES DISTRICT JUDGE